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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,912	11/24/2003	Herbert Ulmer	FDN-2726	5288

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INTERNATIONAL SPECIALTY PRODUCTS  
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EXAMINER

LEE, RIP A

ART UNIT

PAPER NUMBER

1713

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/720,912	ULMER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Rip A. Lee	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on September 18, 2006.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 7 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 7 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

## **DETAILED ACTION**

This office action follows a response filed on September 18, 2006. Claims 2-6 and 8-10 were canceled. Claim 7 is pending.

### ***Claim Objections***

1. Claim 7 is objected to because of the following informalities: It is not entirely clear whether the description “which forms a tough...” modifies the term “tough polymer,” or “hair care product.” Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102 / 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claim 7 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jacquet *et al.* (U.S. 4,283,384).

Example 30 of Jacquet *et al.* discloses a graft polymer of PVA and 10 % of methyl methacrylate. This polymer is used for shampoo compositions (claim 1). The reference does not indicate that the material is a “tough polymer,” as recited in the claims, nor does the reference show that said polymer, or compositions containing said polymer form a flexible, water-resistant film demonstrating excellent hold and durability properties. However, in view of the fact that the polymer is essentially the same as that recited in the instant claims, and in view of the fact that the hair care product of Jacquet *et al.* contains essentially the same graft copolymer, a reasonable basis exists to believe that said polymer or hair care product exhibits the recited properties. Since the PTO can not conduct experiments, the burden of proof is shifted to the Applicants to establish an unobviousness difference. *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02.

4. Claim 7 is also rejected under 35 U.S.C. 103(a) as being unpatentable over Jacquet *et al.*

Claim 1 of Jacquet *et al.* discloses a shampoo composition comprising an aqueous solution of a polymer produced by polymerizing an unsaturated monomer selected from the group consisting of (meth)acrylic acid, hydroxyalkyl (meth)acrylates, (meth)acrylamide, dialkylamino alkyl (meth)acrylates, and diallyl ammonium salts with about 15-95 wt % of polyvinyl alcohol, *inter alia*. The reference does not show examples of graft copolymers of polyvinyl alcohol which incorporates these monomers, however, it is maintained that one of ordinary skill in the art would have been obvious to make a shampoo composition comprising such graft copolymers and thereby arrive at the subject matter of the instant claims because Jacquet *et al.* teach such graft copolymers for this particular end use. It would have been especially obvious to one having ordinary skill in the art select polyvinyl alcohol based graft copolymers in light of the fact that examples 14, 15, and 30 teach preparation of related graft copolymers of polyvinyl alcohol.

The reference does not indicate that polymers of the invention are "tough polymers," as recited in the claims, nor does the reference indicate that inventive graft copolymers, or compositions containing the graft copolymers, form flexible, water-resistant films demonstrating excellent hold and durability properties. However, in view of the fact that the polymer is essentially the same as that recited in the instant claims, and in view of the fact that the hair care product of Jacquet *et al.* contains essentially the same graft copolymer, a reasonable basis exists to believe that the polymer exhibits essentially the same properties. Since the PTO can not conduct experiments, the burden of proof is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

***Response to Arguments***

5. The rejections of claims over Chowdury *et al.* (*J. Appl. Polym. Sci.*, 1998), Gonda (JP 9-157422), Rabasco *et al.* (U.S. 6,348,256), Bedell (U.S. 4,080,346), Takahashi *et al.* (U.S. 5,100,949), Bair *et al.* (U.S. 5,789,488), and JP 43-13047 have been overcome by amendment.

Applicants submit that the shampoo composition of Jacquet *et al.* is not a hair care product that exhibits the claimed properties. It is not clear from the claim, as written, whether the polymer or the overall product would form said film, since the antecedent of the phrase “which forms a tough...” seems to refer to the tough polymer. This interpretation of the claim arises from the parallel construction of the claim language; *q.v.* “...which is polyvinyl alcohol grafted...” that modifies directly the term “tough polymer.” It appears that a shampoo composition adequately qualifies as hair care product, and that the tough polymer is capable of forming a protective film on hair, as is the case with shampoo additives that are not washed away completely with water rinsing. These points notwithstanding, the burden of proof has been shifted to Applicants to address these issues and to establish unobviousness differences over the prior art.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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November 29, 2006

  
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SUPERVISORY PATENT EXAMINER  
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